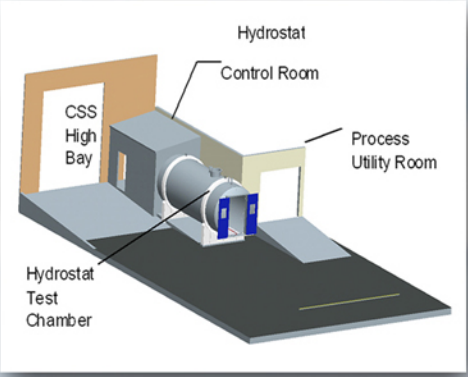
Innovation @ WSTF 2011

Hydrostat Test Chamber



Using an existing chamber, a team of engineers and technicians from White Sands Test Facility's (WSTF) Hardware Processing Components Services Section (CSS) built a hydrostat test chamber. The fully contained system is certified to ASME B31.3 Chapter IX High Pressure requirements and is capable of testing more than 98% of components needing hydrostat pressure tests up to 40,000 psig.

The hydrostat chamber can accommodate flex hoses, pressure vessels, heat exchangers, component filters, and other uniquely designed system units up to 24 ft long. Prior to completion of the new, larger chamber, large components had to be tested in an open bay work area requiring temporary access restrictions while personnel conducted hydrostat tests.

The hydrostat chamber is able to contain energy releases from projectiles resulting in a velocity equal to that of a 9 mm bullet. The automated system allows for improved throughput and data acquisition capabilities. The enhanced ergonomic design and dedicated area for hydrostatic testing has assisted employees in performing their jobs as well as protecting them while using the system.

The hydrostat test stand processes are flexible, and tests can be performed as required by the customer. The hydrostat facility has been utilized in performing run to failure tests such as the FAA tank burst tests.